



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,451	03/25/2004	D'Miles Salmon	ZEPH-00201	1772
28960	7590	05/04/2007		
HAVERSTOCK & OWENS LLP 162 NORTH WOLFE ROAD SUNNYVALE, CA 94086			EXAMINER STOCK JR, GORDON J	
			ART UNIT	PAPER NUMBER
			2877	
			MAIL DATE	DELIVERY MODE
			05/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/811,451

Applicant(s)

SALMON, D'MILES

Examiner

Gordon J. Stock

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20, 22-24, 26 and 27 is/are allowed.
- 6) ☒ Claim(s) 1-9 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20070410.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The Amendment received on January 31, 2007 has been entered into the record.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on April 10, 2007 has been considered by the examiner.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 2, 5, 6, 8, 9, 25** are rejected under 35 U.S.C. 102(a) as being anticipated by **Hart (6,375,579)—previously cited.**

As for **claim 1**, Hart discloses a golf swing analysis system that is a positioning and alignment device (col. 4, lines 60-65) comprising: a first transmitter and a first receiver (Fig. 2: 16 and 34); a second transmitter and a second receiver (Fig. 2: 20, 32); an indicator, display unit (Fig. 2: 46). As for the recitations, “for transmitting positioning signals to a target object ... in a communication path between the positioning object and the target object” and “for transmitting the alignment signals from the target object and for receiving ... in the communication path between the positioning object and the target object” and “for indicating when the positioning object ... towards the target object” it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed

Art Unit: 2877

apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

As for **claim 2**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the first transmitter is a laser (Fig. 2: 16) and the second receiver is a photosensor for detecting the laser light (Fig. 2: 20). As for the recitations 'for generating laser light positioning signals' and 'for detecting the laser light positioning signals' it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

As for **claim 5**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the second transmitter is a radio frequency generator (Fig. 2: 32) and the first receiver is a radio frequency receiver (Fig. 2: 34). As for the recitations 'for generating radio alignment signals' and 'for detecting the radio frequency alignment signals' it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

As for **claim 6**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the indicator is a display element (Fig. 2: 46).

As for **claim 8**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the first transmitter and the first receiver are configured to detachably couple to the positioning object (col. 8, lines 45-46) when the first transmitter and first receiver are considered the sensor and rf transmitter of the sensor module (Fig. 1: 44 and Fig. 2: 20 and 32).

Art Unit: 2877

As for **claim 9**, Hart discloses everything as above (see **claim 1**). In addition, he discloses the second transmitter and the second receiver are configured to be removably positioned near the target object, the golf ball (col. 8, lines 48-50) when the second transmitter and second receiver are considered the laser and rf transmitter of the base unit (Fig. 1: 42 and Fig. 2: 16 and 34).

As for **claim 25**, Hart discloses a system for positioning and alignment (col. 4, lines 60-65); comprising means for providing two way communication path between the object and target (Fig. 1: target comprising 38 and 18 with two communication: Fig. 2: 18 and 33); a positioning unit comprising a first transmitter, first receiver, and an indicator, a counter that indicates the sensors passing into laser field (Fig. 2: 10, 20, 32, 26); a target unit comprising a second transmitter and second receiver (Fig. 2: 42, 16, 34); wherein, the first and second receiver with first and second transmitter provide two-way communication (Fig. 2: 18 and 33); wherein the indicator provides an indication when the object, the golf club, is moved laterally in or out of a trajectory, the laser beam plane, along the two-way communication path (col. 4, lines 50-54). As for the recitations 'for monitoring the alignment of an object with a target,' 'for detachably coupling to the object,' 'for positioning near or at the target' and 'for monitoring the alignment of object' it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hart (6,375,579)-previously cited**.

As for **claim 3**, Hart discloses everything as above (see **claim 2**). In addition, he mentions an optical configuration (Fig. 6). He does not explicitly mention an optical configuration that projects the laser light into an elongated laser beam. However, he states that the laser source provides a plane shaped laser beam (col. 4, lines 5-6). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made that Hart's system had an optical configuration in order to project the laser beam into an expanded plane shape.

Though the Examiner treated the recitation 'for projecting the laser light into an elongated laser beam' positively, this recitation is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

7. **Claims 4 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hart (6,375,579)-previously cited** in view of **Goszyk (6,095,928)-previously cited**.

As for **claim 4**, Hart discloses everything as above (see **claim 3**). And he mentions a second optical configuration (Fig. 3). However, he is silent concerning a second optical

Art Unit: 2877

configuration that filters background light from the second receiver. However, Goszyk in a three-dimensional object path tracking system teaches a high-pass filter for selectively detecting the light of the system rather than ambient light and a spatial filter (col. 6, lines 1-15; col. 10, lines 40-45). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have a second optical configuration such as a spatial filter and a high pass filter in order to have the sensor only detect light from the laser in the base unit without ambient light from the background to increase the signal to noise ratio.

Though the Examiner treated the recitation 'for filtering background light from the second receiver' positively, this recitation is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987).

As for **claim 7**, Hart discloses everything as above (see **claim 6**). He does not state that the display element generates light. However, Goszyk in a three-dimensional object path tracking system teaches having a display element generating light (col. 4, lines 18-20). Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to have the display element generate light in order to make the data accumulated visible to a viewer.

Allowable Subject Matter

8. **Claims 10-20, 22-24, 26 and 27** are allowed.

As to **claim 10**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a system for tracking a trajectory of an object relative to a target area means

Art Unit: 2877

for generating alignment signals and means for detecting the alignment signals at the object, in combination with the rest of the limitations of **claims 10-19**.

As to **claim 20**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a positioning and alignment system 'the positioning unit is configured to illuminate light when the target unit communicates the alignment signal to the positioning unit,' in combination with the rest of the limitations of **claims 20, 22-24**.

As to **claim 26**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a positioning and alignment system 'the positioning unit comprises an optical transmitter' in combination with the rest of the limitations of **claim 26**.

As to **claim 27**, the prior art of record, taken alone or in combination, fails to disclose or render obvious in a positioning and alignment system 'the target unit comprises a radio transmitter' in combination with the rest of the limitations of **claim 27**.

Response to Arguments

9. Applicant's arguments filed January 31, 2007 have been fully considered but they are not persuasive (specifically, arguments regarding rejections under 35 U.S.C. 102(a) to claims 1, 2, 5, 6, 8, 9, and 25 on pages 7-8 of Remarks). In regards to the argument concerning claim 1 that Hart does not teach the particular device, Examiner disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a device 'that indicates lateral alignment as a positioning object is moved through a trajectory in the communication path between the positioning object and the target object and towards the target object') are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

Art Unit: 2877

from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). 'For indicating when the positioning object and the target ... and towards the target object' is an intended use. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex Parte Masham, 2 USPQ F.2d 1647 (1987).

In regards to the argument concerning claim 25 that Hart does not recite an indicator providing an indication when the object is laterally moved in or out of trajectory along the two way communication path, Examiner disagrees. Hart discloses an indicator which provides an indication when the object, the golf club, is moved laterally in or out of a trajectory, the laser beam plane, along the two-way communication path (col. 4, lines 50-54).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Fax/Telephone Numbers

If the applicant wishes to send a fax dealing with either a proposed amendment or a discussion with a phone interview, then the fax should:

- 1) Contain either a statement "DRAFT" or "PROPOSED AMENDMENT" on the fax cover sheet; and
- 2) Should be unsigned by the attorney or agent.

This will ensure that it will not be entered into the case and will be forwarded to the examiner as quickly as possible.

Papers related to the application may be submitted to Group 2800 by Fax transmission. Papers should be faxed to Group 2800 via the PTO Fax machine located in Crystal Plaza 4. The form of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CP4 Fax Machine number is: (571) 273-8300

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gordon J. Stock whose telephone number is (571) 272-2431.

The examiner can normally be reached on Monday-Friday, 10:00 a.m. - 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr., can be reached at 571-272-2800 ext 77.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private Pair system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2877

gs

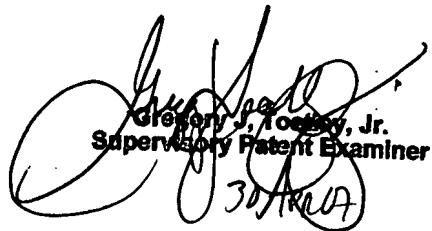
gs

April 30, 2007

Gregory J. Toatley, Jr.

Supervisory Patent Examiner

Art Unit 2877


Gregory J. Toatley, Jr.
Supervisory Patent Examiner
30 APR 07